



GeoShield Verification Report



PROJECT REFERENCE: GEO102875

PROJECT: Neath Port Talbot Hospital (Orthopaedic Unit).

PROJECT ADDRESS: Neath Port Talbot Hospital,

Baglan Way, Port Talbot,

SA12 7BX

SPECIFICATION: Verified in accordance CIRIA 735.

Design in accordance with BS8485 2015 + 2019 for Methane and Carbon Dioxide.

Substrate prepared in-accordance with manufactures instructions.

FC6 Cuspate Geocomposite

JUTA GP1 Gas Membrane

JUTA GP1 SAM

Telescopic Vents



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VERIFICATION OFFICER: Kavanagh Palmer-Fletcher

VERIFICATION COMPANY: GeoShield Limited

Icon Business Park, 4100 Park Approach

Thorpe Park, LEEDS

West Yorkshire

LS15 8GB

CONTACT NUMBER: 07470012812

EMAIL ADDRESS: Kpalmer-fletcher@geoshield.co.uk

ORDER NUMBER:

PER VISIT: YES:

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NO:



PROJECT: YES:



NO:

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MEMBRANE SPECIFICATION:

DESIGN DETAILS:

Geotechnical and Geoenvironmental Report

>Front Page

>Site Location

>Radon (No Radon)

>Characteristic Site Classification (CS2)

>Borehole Locations

Site Built Ground Floor Areas Layouts, Drawing No: 2325-PHG-V1-00-DR-S...

...-0404 Rev C03.

Foundations Sections and Details, Drawing No: 2325-PHG-V1-BG-DR...

...-S-0403 Rev C03.

Foundation Layout, Drawing No: 2325-PHG-V1-BG- DR-S-0402 Rev C05.

Piling Layout, Drawing No: 2325-PHG-V1-BG- DR-S-0401 Rev C04.

Site Built Ground Floor Areas Sections and Details, Drawing No: 2325-PHG...

...V1-BG- DR-S-0405 Rev C03.



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MEMBRANE SPECIFICATION:

DESIGN DETAILS:

Module Gable - Base, Midband and Verge, Drawing No: H2201-MCO-01-...

...XX-DR-A-060003 Rev C01.

Non Standard Base and Midband, Drawing No: H2201-MCO-01-XX-DR...

...-A-060004 Rev C01.

Pressure Relief System Layout.

Perimeter Section.

FC6 Cuspate Geocomposite - Technical Data Sheet.

JUTA GP1 Gas Barrier - Technical Data Sheet.

JUTA GP SAM - Technical Data Sheet.



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CLIENT DETAILS

CLIENT CONTACT:	Jon Taylor
CONTACTS ROLE:	
MOBILE PHONE:	01269591103
EMAIL ADDRESS:	JonTaylor@trjltd.co.uk

CLIENT CONTACT:	Josh
CONTACTS ROLE:	Site Contact
MOBILE PHONE:	
EMAIL ADDRESS	
NOTES:	



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APPLICATOR'S DETAILS

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES:



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AREA SURVEYED: 3 x Link areas.

SITE CONDITIONS:

WEATHER: Cold.

TEMPERATURE: 5c

MEMBRANE TEMPERATURE: N/a

RELATIVE HUMIDITY: N/a

TIME: 13:00-14:30

REPORT NUMBER: 005

DATE: 19/01/2023

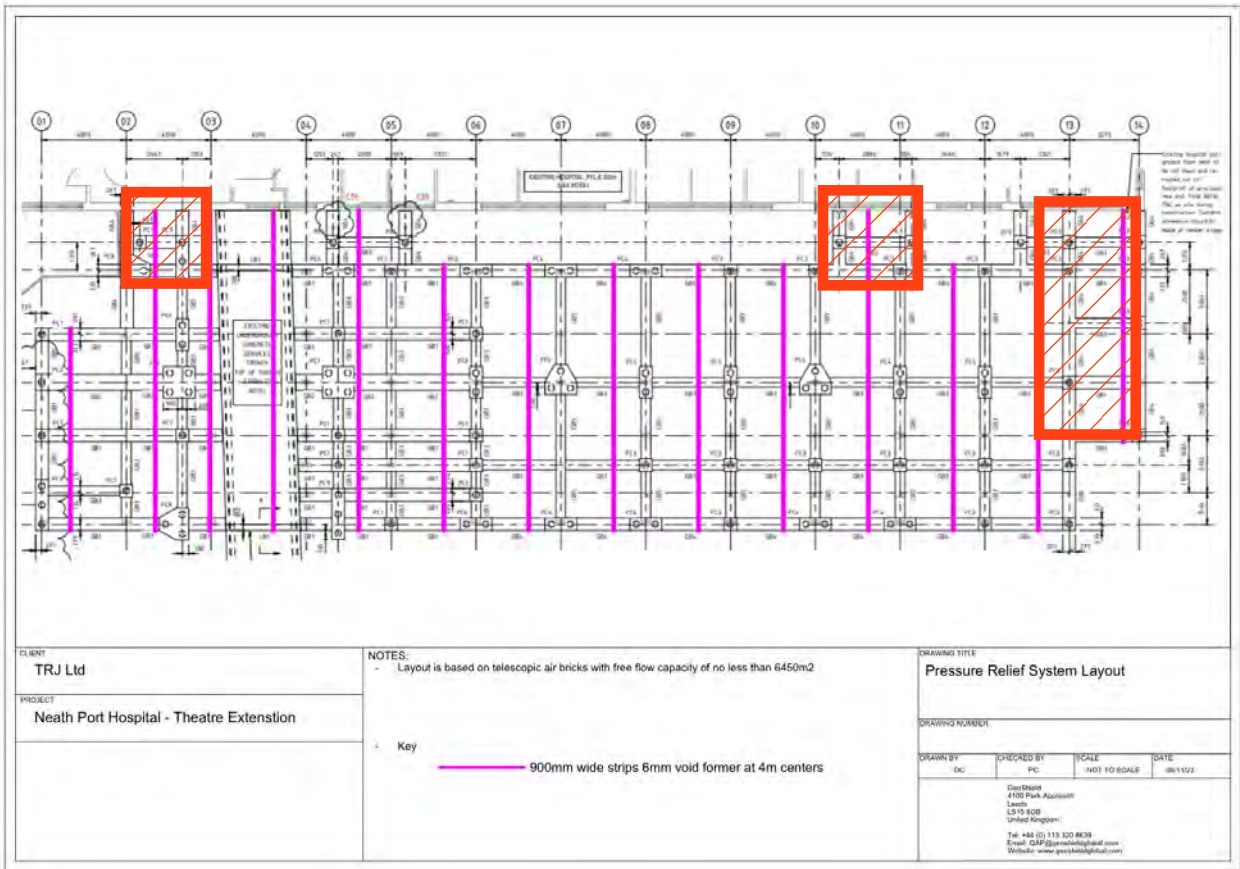
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VERIFICATION LAYOUT



The three link areas highlighted in red above shows where the installers have installed the JUTA GP1 Gas Barrier and where verification took place during this visit.

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OVERVIEW PHOTOGRAPHS



The photograph above shows an overview of one of the link areas. All three

have been verified and signed off during this visit.

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OVERVIEW PHOTOGRAPHS



The photograph above shows an additional link area which has been verified

during this visit.



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VERIFICATION ITEM ONE

LOCATION/GRID LINE: 3 x Link areas.

NOTES: Installation of the JUTA GP1 Gas Membrane.

The first photograph below shows a lap of the JUTA GP1 Gas Membrane. The installers have first lapped the membrane 100mm before using a hot air leister and roller to achieve a strong and consistent 40mm weld.



The second photograph above shows a pick and probe test carried out to a welded lap.

Verified in accordance with CIRIA 735. Any faults identified have been rectified.

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VERIFICATION ITEM ONE



The photograph above shows the installers have sealed the JUTA GP1 Gas

Membrane to the existing hospital building using primer and JUTA GP1 SAM. A hot air

leister and roller has been used to aid in the adherence of the JUTA GP1 SAM.

No faults or defects were identified when testing this part of the design.



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VERIFICATION ITEM TWO

LOCATION/GRID LINE: 3 x Link areas.

NOTES: Penetrations and steel columns sealed.

The first photograph below shows a sealed man hole. The installers have first cut the JUTA GP1 Gas Membrane tight around the man hole to minimise any gaps which need to be sealed.



Next JUTA GP1 SAM has been used to seal each penetration to the membrane.

Heat has been applied to aid in the adherence of the self adhesive membrane.

The second photograph above shows a sealed pipe penetration. Installed in accordance with BS 8485:2019. The second photograph above shows a pick and probe test carried out to a sealed penetration. Verified in accordance with CIRIA 735.

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VERIFICATION ITEM TWO



The photograph above shows a steel column which has been sealed. As with the penetrations the gas membrane has first been installed tight around the the column before sealing it using JUTA GP1 SAM.

Installed in accordance with BS 8485:2019.



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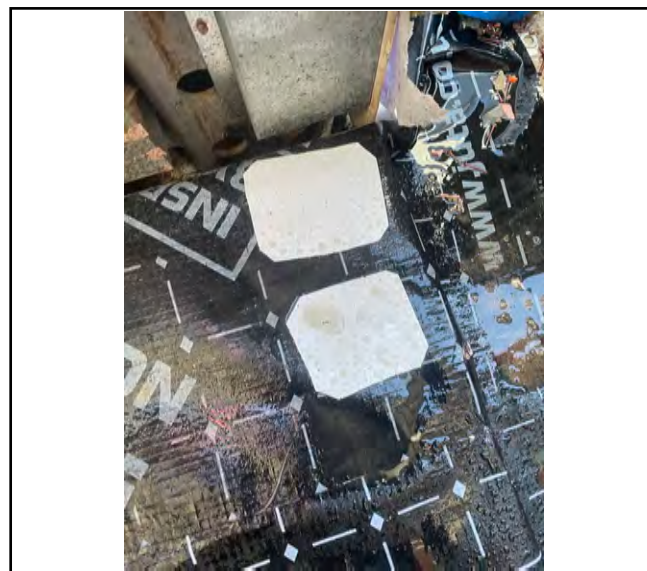


VERIFICATION ITEM THREE

LOCATION/GRID LINE: 3 x Link areas.

NOTES: Faults and remediations.

The first photograph below shows an example of one of the faults identified during this visit. Thorough pick and probe testing found a miss weld. The second photograph below shows a repair to a hole identified in the membrane.



Both faults identified have been patch repaired using 150mm patches of the JUTA

GP1 SAM. A gas blow torch has been used to aid in the adherence of the JUTA

GP1 SAM. A strong seal has been achieved.

No outstanding remediations.



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ADDITIONAL PHOTOGRAPHS



Pick and probe test carried out to a
sealed steel column.



Pick and probe test carried out to a
sealed man hole.



Pick and probe test carried out to the
retro fit detail.



Additional pick and probe test carried
to a welded lap of the membrane.



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GAS MEMBRANE TESTING

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Gridline/Plot Sign off

Gridline/Plot Sign off

Main modular building (not including bays).

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Gridline/Plot Sign off

Modules dropped into place.

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Gridline/Plot Sign off

3 x Link areas.

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Gridline/Plot Sign off

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Gridline/Plot Sign off

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REMEDIATION LOG

Date	Nr	Remediation Description	Y/N
05/12/2022	001	1. Two patch repairs carried out to miss welds identified when	✓
		carrying out air lance testing.	✓
06/12/2022	002	1. One lap was,not welded past the edge of the modules being	✓
		dropped into place, this was rectified using a patch or GP1 SAM	✓
		as shown in verification item 1 of Report 002.	✓
		2. Additional ground floor modules to be dropped into place.	✓
07/12/2022	003	1. One corner and lap needed to be sealed as the module being	✓
		dropped into place was close to these details and would've been	✓
		much harder to seal and a sufficient lap could not have been	✓
		achieved.	✓
		2. One patch repair was carried out using JUTA GP1 SAM.	✓
		3. Some ground floor modules are still to be dropped into place.	✓
21/12/2022	004	Several patch repairs and edge of overlaps to be sealed.	✓
		^remediated onsite.	✓
19/01/2023	005.	1. Two patch repairs carried out using JUTA GP1 SAM.	✓



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VERIFICATION SUMMARY

This was the 5th and final visit to site where verification of the installation of the

JUTA GP1 Gas Membrane to the three link areas was required. All laps of the

membrane have been lapped 100mm and welded using a hot air leister and roller

to achieve a strong and consistent 40mm weld. All pipe penetrations and man-

holes have been sealed using GP1 SAM. Steel columns have been sealed. The

newly installed membrane has been sealed to the existing building in a retro fit

fashion. Any faults identified have been patch repaired using JUTA GP1 SAM.

No outstanding remediations. This project is ready for handover.

Installed in accordance with BS 8485:2019.

Verified in accordance with CIRIA 735.

GEOSHIELD SIGNATURE:

DATE: 19/01/2023